SEQUENCE LISTING

<110> GARABEDIAN, Michael
      TANEJA, Samir
      HITTELMAN, Adam
      MARKUS, Steven

<120> METHOD FOR SCREENING TRANSCRIPTIONAL COREGULATORY PROTEINS OF TRANSCRIPTION FACTORS, AND ANDROGEN RECEPTOR TRANSCRIPTIONAL COREGULATORY PROTEINS AS TARGETS FOR ANDROGEN RECEPTOR-DEPENDENT DISEASES

<130> GARABEDIAN=1.1A

<140> NOT YET ASSIGNED
<141> 2001-03-26

<150> 60/225,618
<151> 2000-08-15

<150> 60/191,768
<151> 2000-03-24

<160> 20

<170> PatentIn version 3.0

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gaagctaagc actcggagtt atatatgcag gtggatttgg gctgtaactt cttcgttgac   240

acagtggtcc cagatacttc acgcatctat gtggccctgg gatatggttt tttcctggag   300

ttgacactgg cagaagctct caagttcatt gatcgtaaga gctctctcct cacagagctc   360

agcaacagcc tcaccaagga ctccatgaat atcaaagccc atatccacat gttgctagag   420

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                20   25   30

Arg Lys Val Leu Asp His Arg Asp Lys Val Tyr Glu Gln Leu Ala Lys

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            35                  40                  45
Tyr Leu Gln Leu Arg Asn Val Ile Glu Arg Leu Gln Glu Ala Lys His
    50                  55                  60
Ser Glu Leu Tyr Met Gln Val Asp Leu Gly Cys Asn Phe Phe Val Asp
65                  70                  75                  80
Thr Val Val Pro Asp Thr Ser Arg Ile Tyr Val Ala Leu Gly Tyr Gly
                85                  90                  95
Phe Phe Leu Glu Leu Thr Leu Ala Glu Ala Leu Lys Phe Ile Asp Arg
            100                 105                 110
Lys Ser Ser Leu Leu Thr Glu Leu Ser Asn Ser Leu Thr Lys Asp Ser
            115                 120                 125
Met Asn Ile Lys Ala His Ile His Met Leu Leu Glu Gly Leu Arg Glu
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Leu Gln Gly Leu Gln Asn Phe Pro Glu Lys Pro His His
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gccagcccca gccgggaccc cacaaggcaa agaccaagaa gattgtgttt gaggatgagt   360

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agcctaggcc ccacccagtg cccgactatg agcttaagta cccgccagtg agcagtgaga   480

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            20   25   ·30

Ala Gly His Asp Ala Pro Arg Arg Thr Arg Pro Ser Ala Arg Lys Pro
        35   40   45

Leu Ser Cys Phe Ser Arg Arg Pro Met Pro Thr Arg Glu Pro Pro Lys
    50   55   60

Thr Arg Gly Ser Arg Gly His Leu His Thr His Pro Pro Gly Pro Gly
65   70   75   80

Pro Pro Leu Gln Gly Leu Ala Pro Arg Gly Leu Lys Thr Ser Ala Pro
                85   90   95

Arg Pro Pro Cys Gln Pro Gln Pro Gly Pro His Lys Ala Lys Thr Lys
            100   105   110

Lys Ile Val Phe Glu Asp Glu Leu Leu Ser Gln Ala Leu Leu Gly Ala
            115   120   125

Lys Lys Pro Ile Gly Ala Ile Pro Lys Gly His Lys Pro Arg Pro His
    130   135   140

Pro Val Pro Asp Tyr Glu Leu Lys Tyr Pro Pro Val Ser Ser Glu Arg
145   150   155   160

Glu Arg Ser Arg Tyr Val Ala Val Phe Gln Asp Gln Tyr Gly Glu Phe
                165   170   175

Leu Glu Leu Gln His Glu Val Gly Cys Ala Gln Ala Lys Leu Arg Gln
            180   185   190

Leu Glu Ala Leu Leu Ser Ser Leu Pro Pro Pro Gln Ser Gln Lys Glu
            195   200   205

Ala Gln Val Ala Ala Arg Val Trp Arg Glu Phe Glu Met Lys Arg Met
    210   215   220

Asp Pro Gly Phe Leu Asp Lys Gln Ala Arg Cys His Tyr Leu Lys Gly
225   230   235   240

Lys Leu Arg His Leu Lys Thr Gln Ile Gln Lys Phe Asp Asp Gln Gly
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Asp Ser Glu Gly Ser Val Tyr Phe
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ccgggccgag cgcagcgcgc cggccgssyg ggccgccagg ggcgcgcgcg gcggagcgcg     180

gggcgcgmga aaagggqccc ggcggagacc aagggcaggc gcggcccgca agggcgccgg     240

ggaaggcgcc cggcaaggag gcggacaagc ggagcaggcc aacgagacgc gcgcacccac     300

acacgagcgc gagccgccac aacaccacac ccggcccaag gagaacagca cgccaacgcg     360

ccagycacgg cgggcacggg aggcgggcca cacacagcgg ccccgccaag gcacggcgca     420

cggcacaagg gcaccacgcc agacaagcga ggaggcagca cgccgagacc ggccggaggg     480

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            20                  25                  30

Ala Leu Leu Ser Pro Ser Trp Tyr Ser Thr Ala Arg Ala Val Phe Ser
        35                  40                  45

Val Ala Glu Leu Gln Ser Arg Leu Ala Ala Leu Gly Arg Gln Val Gly
    50                  55                  60

Ala Arg Val Leu Asp Ala Leu Val Ala Arg Glu Lys Gly Ala Arg Arg
65                  70                  75                  80

Glu Thr Lys Val Leu Gly Ala Leu Leu Phe Val Lys Gly Ala Val Trp
                85                  90                  95

Lys Ala Leu Phe Gly Lys Glu Ala Asp Lys Leu Glu Gln Ala Asn Asp
                100                 105                 110

Asp Ala Arg Thr Phe Tyr Ile Ile Glu Arg Glu Pro Leu Ile Asn Thr
            115                 120                 125

Tyr Ile Ser Val Pro Lys Glu Asn Ser Thr Leu Asn Cys Ala Ser Phe
        130                 135                 140
```

```
Thr Ala Gly Ile Val Glu Ala Val Leu Thr His Ser Gly Phe Pro Ala
145             150             155             160

Lys Val Thr Ala His Trp His Lys Gly Thr Thr Leu Met Ile Lys Phe
                165             170             175

Glu Glu Ala Val Ile Ala Arg Asp Arg Leu Glu Gly Arg
            180             185
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caagga                                                                 126
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<211>   42
<212>   PRT
<213>   Human

<400>   8

Glu Phe Gly Thr Arg Leu Lys Pro Tyr Val Ser Tyr Leu Ala Pro Glu
1               5               10              15

Ser Glu Glu Thr Pro Leu Thr Ala Ala Gln Leu Phe Ser Lys Pro Leu
            20              25              30

Ala Pro Cys His Arg Lys Gly Leu Gln Gly
            35              40
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<213>   Human

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caccacccaa caatgactaa tcaaactaac ctcaaaacaa atgataacca tacacaacac     180

taaaggacga acctgatctc ttatactagt atccttaatc atttttattg ccacaactaa     240

cctcctcgga ctcctgcctc actcatttac accaaccacc caactatcta taaacctagc     300

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cattaacctt cctctacact tatcatcttc acaattctaa ttctactgac tatcctagaa     600

atcgctgtcg ccttaatcca agcctacgtt ttcacacttc tagtaagcct ntactgnacg     660

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<210>    10
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<213>    Human

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Arg Ser Thr Asp His Ser Ile Ser Pro Ser Ile Asp Pro His Leu Gln
            20              25              30

Ile Ser His Gln Gln Pro Thr Asn His His Pro Thr Met Thr Asn Gln
        35              40              45

Thr Asn Leu Lys Thr Asn Asp Asn His Thr Gln His
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agcctaactt ttcatcaggc aatacatact ggagagaaac cttacaaatg tcatgaatgc     180

ggcaaggttt ttaggcacaa ttcatacctt gcaactcatc ggcgaattca tactggagag     240

aaaccttaca agtgtaatga gtgtgggaaa gcctttagta tgcattcaaa cctaactacc     300

cataaggtca tccatactgg agagaagcct tacaaatgta atcaatgtgg caaggtcttc     360

actcagaact cacaccttgc aaatcatcaa aggactcaca ccggagagaa accttaccga     420

tgcaatgagt gtgggaaagc cttcagtgtt cgttcaagcc taaccaccca tcaggcaatc     480

catactggga aaaaacctta caaatgtaat gaatgtggca aggtctttac tcaaaatgct     540

cacctggcaa atcaccgaag aattcatact ggggagaaac cttacaggtg tacagagtgt     600

gggaaagcct ttagggtaag atcaagtcta actacccata tggcaatcca cactggagaa     660

aagcgttaca aatgtaatga gtgtggcaag gtcttcaggc agagttcaaa tcttgcaagt     720

catcacagaa tgcataccgg agagaaacct tacaaatgag tgtggtgagg tcattaggta     780
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gctgaggcag gtggatcacc tgaggtcggg agttcgagac cagcctgacc aacatggaga   1860

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<212>    PRT
<213>    Human

<400>    12

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His Trp Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Asp Cys
            20                  25                  30

Gly Arg Ala Phe Ser Asp Arg Ser Ser Leu Thr Phe His Gln Ala Ile
        35                  40                  45

His Thr Gly Glu Lys Pro Tyr Lys Cys His Glu Cys Gly Lys Val Phe
    50                  55                  60

Arg His Asn Ser Tyr Leu Ala Thr His Arg Arg Ile His Thr Gly Glu
65                  70                  75                  80

Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Met His Ser
                85                  90                  95
```

```
Asn Leu Thr Thr His Lys Val Ile His Thr Gly Glu Lys Pro Tyr Lys
        100               105               110
Cys Asn Gln Cys Gly Lys Val Phe Thr Gln Asn Ser His Leu Ala Asn
        115               120               125
His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Arg Cys Asn Glu Cys
    130               135               140
Gly Lys Ala Phe Ser Val Arg Ser Ser Leu Thr Thr His Gln Ala Ile
145               150               155               160
His Thr Gly Lys Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe
                165               170               175
Thr Gln Asn Ala His Leu Ala Asn His Arg Arg Ile His Thr Gly Glu
        180               185               190
Lys Pro Tyr Arg Cys Thr Glu Cys Gly Lys Ala Phe Arg Val Arg Ser
        195               200               205
Ser Leu Thr Thr His Met Ala Ile His Thr Gly Glu Lys Arg Tyr Lys
    210               215               220
Cys Asn Glu Cys Gly Lys Val Phe Arg Gln Ser Ser Asn Leu Ala Ser
225               230               235               240
His His Arg Met His Thr Gly Glu Lys Pro Tyr Lys
            245               250
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<212> DNA
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Gly Glu Ser Phe Ile Gln Thr Asn Asp Pro Ser Leu Lys Leu Phe Gln
            20                  25                  30

Cys Ala Val Cys Asn Lys Phe Thr Thr Asp Asn Leu Asp Met Leu Gly
        35                  40                  45

Leu His Met Asn Val Glu Arg Ser Leu Ser Glu Asp Glu Trp Lys Ala
    50                  55                  60

Val Met Gly Asp Ser Tyr Gln Cys Lys Leu Cys Arg Tyr Asn Thr Gln
65                  70                  75                  80

Leu Lys Ala Asn Phe Gln Leu His Cys Lys Thr Asp Lys His Val Gln
                85                  90                  95

Lys Tyr Gln Leu Val Ala His Ile Lys Glu Gly Gly Lys Ala Asn Glu
            100                 105                 110

Trp Arg Leu Lys Cys Val Ala Ile Gly Asn Pro Val His Leu Lys Cys
        115                 120                 125

Asn Ala Cys Asp Tyr Tyr Thr Asn Ser Leu Glu Lys Leu Arg Leu His
    130                 135                 140

Thr Val Asn Ser Arg His Glu Ala Ser Leu Lys Leu Tyr Lys His Leu
145                 150                 155                 160

Gln Gln His Glu Ser Gly Val Glu Gly Glu Ser Cys Tyr Tyr His Cys
                165                 170                 175

Val Leu Cys Asn Tyr Ser Thr Lys Ala Lys Leu Asn Leu Ile Gln His
            180                 185                 190

Val Arg Ser Met Lys His Gln Arg Ser Glu Ser Leu Arg Lys Leu Gln
            195                 200                 205

Arg Leu Gln Lys Gly Leu Pro Glu Glu Asp Glu Asp Leu Gly Gln Ile
    210                 215                 220

Phe Thr Ile Arg Arg Cys Pro Ser Thr Asp Pro Glu Glu Ala Ile Glu
225                 230                 235                 240
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Asp Val Glu Gly Pro Ser Glu Thr Ala Ala Asp Pro Glu Glu Leu Ala
          245   250   255

Lys Asp Gln Glu Gly Gly Ala Ser Ser Ser Gln Ala Glu Lys Glu Leu
          260   265   270

Thr Asp Ser Pro Ala Thr Ser Lys Arg Ile Ser Phe Pro Gly Ser Ser
          275   280   285

Glu Ser Pro Leu Ser Ser Lys Arg Pro Lys Thr Ala Glu Glu Ile Lys
    290   295   300

Pro Glu Gln Met Tyr Gln Cys Pro Tyr Cys Lys Tyr Ser Asn Ala Asp
305   310   315   320

Val Asn Arg Leu Arg Val His Ala Met Thr Gln His Ser Val Gln Pro
          325   330   335

Met Leu Arg Cys Pro Leu Cys Gln Asp Met Leu Asn Asn Lys Ile His
          340   345   350

Leu Gln Leu His Leu Thr His Leu His Ser Val Ala Pro Asp Cys Val
          355   360   365

Glu Lys Leu Ile Met Thr Val Thr Thr Pro Glu Met Val Met Pro Ser
    370   375   380

Ser Met Phe Leu Pro Ala Ala Val Pro Asp Arg Asp Gly Asn Ser Asn
385   390   395   400

Leu Glu Glu Ala Gly Lys Gln Pro Glu Thr Ser Glu Asp Leu Gly Lys
          405   410   415

Asn Ile Leu Pro Ser Ala Ser Thr Glu Gln Ser Gly Asp Leu Lys Pro
          420   425   430

Ser Pro Ala Asp Pro Gly Ser Val Arg Glu Asp Ser Gly Phe Ile Cys
          435   440   445

Trp Lys Lys Gly Cys Asn Gln Val Phe Lys Thr Ser Ala Ala Leu Gln
    450   455   460

Thr His Phe Asn Glu Val His Ala Lys Arg Pro Gln Leu Pro Val Ser
465   470   475   480

Asp Arg His Val Tyr Lys Tyr Arg Cys Asn Gln Cys Ser Leu Ala Phe
          485   490   495

Lys Thr Ile Glu Lys Leu Gln Leu His Ser Gln Tyr His Val Ile Arg
          500   505   510

Ala Ala Thr Met Cys Cys Leu Cys Gln Arg Ser Phe Arg Thr Phe Gln
          515   520   525

Ala Leu Lys Lys His Leu Glu Thr Ser His Leu Glu Leu Ser Glu Ala
          530   535   540

Asp Ile Gln Gln Leu Tyr Gly Gly Leu Leu Ala Asn Gly Asp Leu Leu
545   550   555   560

Ala Met Gly Asp Pro Thr Leu Ala Glu Asp His Thr Ile Ile Val Glu
          565   570   575

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Thr Gly Pro Gly Leu Leu Glu Asp Leu Lys Ala Gln Val Gln Val Pro
    915                 920                 925

Gln Gln Ser His Gln Gln Ile Leu Pro Gln Gln Gln Gln Asn Gln Leu
    930                 935                 940

Ser Ile Ala Gln Ser His Ser Ala Leu Leu Gln Pro Ser Gln His Pro
945                 950                 955                 960

Glu Lys Lys Asn Lys Leu Val Ile Lys Glu Lys Glu Lys Glu Ser Gln
                965                 970                 975

Arg Glu Arg Asp Ser Ala Glu Gly Gly Glu Gly Asn Thr Gly Pro Lys
        980                 985                 990

Glu Thr Leu Pro Asp Ala Leu Lys  Ala Lys Glu Lys Lys  Glu Leu Ala
        995                 1000                1005

Pro Gly  Gly Gly Ser Glu Pro  Ser Met Leu Pro Pro  Arg Ile Ala
    1010                1015                1020

Ser Asp  Ala Arg Gly Asn Ala  Thr Lys Ala Leu Leu  Glu Asn Phe
    1025                1030                1035

Gly Phe  Glu Leu Val Ile Gln  Tyr Asn Glu Asn Lys  Gln Lys Val
    1040                1045                1050

Gln Lys  Lys Asn Gly Lys Thr  Asp Gln Gly Glu Asn  Leu Glu Lys
    1055                1060                1065

Leu Glu  Cys Asp Ser Cys Gly  Lys Leu Phe Ser Asn  Ile Leu Ile
    1070                1075                1080

Leu Lys  Ser His Gln Glu His  Val His Gln Asn Tyr  Phe Pro Phe
    1085                1090                1095

Lys Gln  Leu Glu Arg Phe Ala  Lys Gln Tyr Arg Asp  His Tyr Asp
    1100                1105                1110

Lys Leu  Tyr Pro Leu Arg Pro  Gln Thr Pro Glu Pro  Pro Pro Pro
    1115                1120                1125

Pro Pro  Pro Pro Pro Pro Pro  Pro Leu Pro Ala Ala  Pro Pro Gln
    1130                1135                1140

Pro Ala  Ser Thr Pro Ala Ile  Pro Ala Ser Ala Pro  Pro Ile Thr
    1145                1150                1155

Ser Pro  Thr Ile Ala Pro Ala  Gln Pro Ser Val Pro  Leu Thr Gln
    1160                1165                1170

Leu Ser  Met Pro Met Glu Leu  Pro Ile Phe Ser Pro  Leu Met Met
    1175                1180                1185

Gln Thr  Met Pro Leu Gln Thr  Leu Pro Ala Gln Leu  Pro Pro Gln
    1190                1195                1200

Leu Gly  Pro Val Glu Pro Leu  Pro Ala Asp Leu Ala  Gln Leu Tyr
    1205                1210                1215

Gln His  Gln Leu Asn Pro Thr  Leu Leu Gln Gln Gln  Asn Lys Arg
    1220                1225                1230
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Pro Arg Thr Arg Ile Thr Asp   Asp Gln Leu Arg Val   Leu Arg Gln
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Tyr Phe Asp Ile Asn Asn Ser   Pro Ser Glu Glu Gln   Ile Lys Glu
    1250   1255   1260

Met Ala Asp Lys Ser Gly Leu   Pro Gln Lys Val Ile   Lys His Trp
    1265   1270   1275

Phe Arg Asn Thr Leu Phe Lys   Glu Arg Gln Arg Asn   Lys Asp Ser
    1280   1285   1290

Pro Tyr Asn Phe Ser Asn Pro   Pro Ile Thr Ser Leu   Glu Glu Leu
    1295   1300   1305

Lys Ile Asp Ser Arg Pro Pro   Ser Pro Glu Pro Pro   Lys Gln Glu
    1310   1315   1320

Tyr Trp Gly Ser Lys Arg Ser   Ser Arg Thr Arg Phe   Thr Asp Tyr
    1325   1330   1335

Gln Leu Arg Val Leu Gln Asp   Phe Phe Asp Ala Asn   Ala Tyr Pro
    1340   1345   1350

Lys Asp Asp Glu Phe Glu Gln   Leu Ser Asn Leu Leu   Asn Leu Pro
    1355   1360   1365

Thr Arg Val Ile Val Val Trp   Phe Gln Asn Ala Arg   Gln Lys Ala
    1370   1375   1380

Arg Lys Asn Tyr Glu Asn Gln   Gly Glu Gly Lys Asp   Gly Glu Arg
    1385   1390   1395

Arg Glu Leu Thr Asn Asp Arg   Tyr Ile Arg Thr Ser   Asn Leu Asn
    1400   1405   1410

Tyr Gln Cys Lys Lys Cys Ser   Leu Val Phe Gln Arg   Ile Phe Asp
    1415   1420   1425

Leu Ile Lys His Gln Lys Lys   Leu Cys Tyr Lys Asp   Glu Asp Glu
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Glu Gly Gln Asp Asp Ser Gln   Asn Glu Asp Ser Met   Asp Ala Met
    1445   1450   1455

Glu Ile Leu Thr Pro Thr Ser   Ser Ser Cys Ser Thr   Pro Met Pro
    1460   1465   1470

Ser Gln Ala Tyr Ser Ala Pro   Ala Pro Ser Ala Asn   Asn Thr Ala
    1475   1480   1485

Ser Ser Ala Phe Leu Gln Leu   Thr Ala Glu Ala Glu   Glu Leu Ala
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Thr Phe Asn Ser Lys Thr Glu   Ala Gly Asp Glu Lys   Pro Lys Leu
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Ala Glu Ala Pro Ser Ala Gln   Pro Asn Gln Thr Gln   Glu Lys Gln
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Gly Gln Pro Lys Pro Glu Leu   Gln Gln Gln Glu Gln   Pro Glu Gln
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Lys Thr Asn Thr Pro Gln Gln  Lys Leu Pro Gln Leu  Val Ser Leu
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Pro Ser Leu Pro Gln Pro Pro  Pro Gln Ala Pro Pro  Pro Gln Cys
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Pro Leu Pro Gln Ser Ser Pro  Ser Pro Ser Gln Leu  Ser His Leu
    1580            1585               1590

Pro Leu Lys Pro Leu His Thr  Ser Thr Pro Gln Gln  Leu Ala Asn
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Leu Pro Pro Gln Leu Ile Pro  Tyr Gln Cys Asp Gln  Cys Lys Leu
    1610            1615               1620

Ala Phe Pro Ser Phe Glu His  Trp Gln Glu His Gln  Gln Leu His
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Phe Leu Ser Ala Gln Asn Gln  Phe Ile His Pro Gln  Phe Leu Asp
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Arg Ser Leu Asp Met Pro Phe  Met Leu Phe Asp Pro  Ser Asn Pro
    1655            1660               1665

Leu Leu Ala Ser Gln Leu Leu  Ser Gly Ala Ile Pro  Gln Ile Pro
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Ala Ser Ser Ala Thr Ser Pro  Ser Thr Pro Thr Ser  Thr Met Asn
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Thr Leu Lys Arg Lys Leu Glu  Glu Lys Ala Ser Ala  Ser Pro Gly
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Glu Asn Asp Ser Gly Thr Gly  Gly Glu Glu Pro Gln  Arg Asp Lys
    1715            1720               1725

Arg Leu Arg Thr Thr Ile Thr  Pro Glu Gln Leu Glu  Ile Leu Tyr
    1730            1735               1740

Gln Lys Tyr Leu Leu Asp Ser  Asn Pro Thr Arg Lys  Met Leu Asp
    1745            1750               1755

His Ile Ala His Glu Val Gly  Leu Lys Lys Arg Val  Val Gln Val
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Trp Phe Gln Asn Thr Arg Ala  Arg Glu Arg Lys Gly  Gln Phe Arg
    1775            1780               1785

Ala Val Gly Pro Ala Gln Ala  His Arg Arg Cys Pro  Phe Cys Arg
    1790            1795               1800

Ala Leu Phe Lys Ala Lys Thr  Ala Leu Glu Ala His  Ile Arg Ser
    1805            1810               1815

Arg His Trp His Glu Ala Lys  Arg Ala Gly Tyr Asn  Leu Thr Leu
    1820            1825               1830

Ser Ala Met Leu Leu Asp Cys  Asp Gly Gly Leu Gln  Met Lys Gly
    1835            1840               1845

Asp Ile Phe Asp Gly Thr Ser  Phe Ser His Leu Pro  Pro Ser Ser
    1850            1855               1860
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Ser Asp Gly Gln Gly Val Pro Leu Ser Pro Val Ser Lys Thr Met
    1865   1870   1875

Glu Leu Ser Pro Arg Thr Leu Leu Ser Pro Ser Ser Ile Lys Val
    1880   1885   1890

Glu Gly Ile Glu Asp Phe Glu Ser Pro Ser Met Ser Ser Val Asn
    1895   1900   1905

Leu Asn Phe Asp Gln Thr Lys Leu Asp Asn Asp Asp Cys Ser Ser
    1910   1915   1920

Val Asn Thr Ala Ile Thr Asp Thr Thr Thr Gly Asp Glu Gly Asn
    1925   1930   1935

Ala Asp Asn Asp Ser Ala Thr Gly Ile Ala Thr Glu Thr Lys Ser
    1940   1945   1950

Ser Ser Ala Pro Asn Glu Gly Leu Thr Lys Ala Ala Met Met Ala
    1955   1960   1965

Met Ser Glu Tyr Glu Asp Arg Leu Ser Ser Gly Leu Val Ser Pro
    1970   1975   1980

Ala Pro Ser Phe Tyr Ser Lys Glu Tyr Asp Asn Glu Gly Thr Val
    1985   1990   1995

Asp Tyr Ser Glu Thr Ser Ser Leu Ala Asp Pro Cys Ser Pro Ser
    2000   2005   2010

Pro Gly Ala Ser Gly Ser Ala Gly Lys Ser Gly Asp Ser Gly Asp
    2015   2020   2025

Arg Pro Gly Gln Lys Arg Phe Arg Thr Gln Met Thr Asn Leu Gln
    2030   2035   2040

Leu Lys Val Leu Lys Ser Cys Phe Asn Asp Tyr Arg Thr Pro Thr
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Met Leu Glu Cys Glu Val Leu Gly Asn Asp Ile Gly Leu Pro Lys
    2060   2065   2070

Arg Val Val Gln Val Trp Phe Gln Asn Ala Arg Ala Lys Glu Lys
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Lys Ser Lys Leu Ser Met Ala Lys His Phe Gly Ile Asn Gln Thr
    2090   2095   2100

Ser Tyr Glu Gly Pro Lys Thr Glu Cys Thr Leu Cys Gly Ile Lys
    2105   2110   2115

Tyr Ser Ala Arg Leu Ser Val Arg Asp His Ile Phe Ser Gln Gln
    2120   2125   2130

His Ile Ser Lys Val Lys Asp Thr Ile Gly Ser Gln Leu Asp Lys
    2135   2140   2145

Glu Lys Glu Tyr Phe Asp Pro Ala Thr Val Arg Gln Leu Met Ala
    2150   2155   2160

Gln Gln Glu Leu Asp Arg Ile Lys Lys Ala Asn Glu Val Leu Gly
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Ala Leu  Asn Leu Pro Thr Ala  Tyr Pro Ala Leu Gln  Gly Ile Pro
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Pro Val  Leu Leu Pro Gly Leu  Asn Ser Pro Ser Leu  Pro Gly Phe
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Thr Pro  Ser Asn Thr Ala Leu  Thr Ser Pro Lys Pro  Asn Leu Met
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Gly Leu  Pro Ser Thr Thr Val  Pro Ser Pro Gly Leu  Pro Thr Ser
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Gly Leu  Pro Asn Lys Pro Ser  Ser Ala Ser Leu Ser  Ser Pro Thr
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Pro Ala  Gln Ala Thr Met Ala  Met Gly Pro Gln Gln  Pro Pro Gln
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Gln Gln  Gln Gln Gln Gln Gln  Pro Gln Val Gln Gln  Pro Pro Pro
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Pro Pro  Ala Ala Gln Pro Pro  Pro Thr Pro Gln Leu  Pro Leu Gln
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Gln Gln  Gln Gln Arg Lys Asp  Lys Asp Ser Glu Lys  Val Lys Glu
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Lys Glu  Lys Ala His Lys Gly  Lys Gly Glu Pro Leu  Pro Val Pro
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Lys Lys  Glu Lys Gly Glu Ala  Pro Thr Ala Thr Ala  Ala Thr Ile
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Ser Ala  Pro Leu Pro Thr Met  Glu Tyr Ala Val Asp  Pro Ala Gln
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Leu Gln  Ala Leu Gln Ala Ala  Leu Thr Ser Asp Pro  Thr Ala Leu
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Leu Thr  Ser Gln Phe Leu Pro  Tyr Phe Val Pro Gly  Phe Ser Pro
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Tyr Tyr  Ala Pro Gln Ile Pro  Gly Ala Leu Gln Ser  Gly Tyr Leu
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Gln Pro  Met Tyr Gly Met Glu  Gly Leu Phe Pro Tyr  Ser Pro Ala
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Leu Ser  Gln Ala Leu Met Gly  Leu Ser Pro Gly Ser  Leu Leu Gln
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Gln Tyr  Gln Gln Tyr Gln Gln  Ser Leu Gln Glu Ala  Ile Gln Gln
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Gln Gln  Gln Gln Lys Val Gln  Gln Gln Gln Pro Lys  Ala Ser Gln
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Thr Pro  Val Pro Pro Gly Ala  Pro Ser Pro Asp Lys  Asp Pro Ala
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Val Ser  Pro Leu Leu Pro Lys  Leu Pro Glu Glu  Pro  Glu Ala Glu
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Ser Lys  Ser Ala Asp Ser Leu  Tyr Asp Pro Phe  Ile  Val Pro Lys
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Val Gln  Tyr Lys Leu Val Cys  Arg Lys Cys Gln  Ala  Gly Phe Ser
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Asp Glu  Glu Ala Ala Arg Ser  His Leu Lys Ser  Leu  Cys Phe Phe
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Gly Gln  Ser Val Val Asn Leu  Gln Glu Met Val  Leu  His Val Pro
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Thr Gly  Gly Gly Gly Gly Gly  Ser Gly Gly Gly  Gly  Gly Gly Gly
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Gly Gly  Gly Gly Gly Gly Gly  Gly Gly Ser Tyr  His  Cys Leu Ala
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Cys Glu  Ser Ala Leu Cys Gly  Glu Glu Ala Leu  Ser  Gln His Leu
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```

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Glu Ser  Ala Leu His Lys His  Arg Thr Ile Thr  Arg  Ala Ala Arg
    2630             2635              2640
```

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Asn Ala  Lys Glu His Pro Ser  Leu Leu Pro His  Ser  Ala Cys Phe
    2645             2650              2655
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Pro Asp  Pro Ser Thr Ala Ser  Thr Ser Gln Ser  Ala  Ala His Ser
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Asn Asp  Ser Pro Pro Pro Pro  Ser Ala Ala Ala  Pro  Ser Ser Ala
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Ser Pro  His Ala Ser Arg Lys  Ser Trp Pro Gln  Val  Val Ser Arg
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Ala Ser  Ala Ala Lys Pro Pro  Ser Phe Pro Pro  Leu  Ser Ser Ser
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```

```
Ser Gln  Lys Ser Asp Gly Pro  Ala Ser Pro Val  Glu  Gly Pro Lys
    2750             2755              2760
```

```
Asp Pro  Ser Cys Pro Lys Asp  Ser Gly Leu Thr  Ser  Val Gly Thr
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```
Asp Thr  Phe Arg Leu
    2780
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garabedian1.1A.ST25.txt

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